

2,4-Dinitrophenylhydrazine

Version number: GHS 3.0
Replaces version of: 2020-12-02 (GHS 2)

Revision: 2023-04-20

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Identification of the substance **2,4-Dinitrophenylhydrazine**
CAS number 119-26-6
Article number A0011739

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses General use

1.3 Details of the supplier of the safety data sheet

Chemos GmbH & Co. KG
Sonnenring 7
84032 Altdorf
Germany

Telephone: +49 871-966346-0
Telefax: +49 871-966346-13
e-mail: chemos@chemos.de
Website: <http://www.chemos.de/>

e-mail (competent person) chemos@chemos.de

1.4 Emergency telephone number

Emergency information service +49 89 1 92 40

Poison centre				
Country	Name	Postal code/ city	Telephone	Telefax
United Kingdom	National Poison Information Centre Medical Toxicology Unit	SE14 5ER Lon- don	+44 171 635 91 91	

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

Section	Hazard class	Category	Hazard class and category	Hazard statement
2.7	flammable solid	2	Flam. Sol. 2	H228
2.17	desensitised explosives	1	Desens. Expl. 1	H206
3.10	acute toxicity (oral)	4	Acute Tox. 4	H302

For full text of abbreviations: see SECTION 16.

2.2 Label elements

Labelling

- Signal word danger

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- Pictograms

GHS02, GHS07



- Hazard statements

- H206 Fire, blast or projection hazard; increased risk of explosion if desensitising agent is reduced.
- H228 Flammable solid.
- H302 Harmful if swallowed.

- Precautionary statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P212 Avoid heating under confinement or reduction of the desensitized agent.
- P230 Keep wetted with water.
- P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/....
- P370+P378 In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.
- P370+P380+P375 In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.

2.3 Other hazards

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of $\geq 0,1\%$.

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance 2,4-Dinitrophenylhydrazine

Identifiers

CAS No 119-26-6

Specific Conc. Limits	M-Factors	ATE	Exposure route
-	-	500 mg/kg	oral

Molecular formula C6H6N4O4

Molar mass 198.1 g/mol

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

Brush off loose particles from skin. Rinse skin with water/shower.

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Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water, Foam, ABC-powder

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Deposited combustible dust has considerable explosion potential.

Hazardous combustion products

Nitrogen oxides (NO_x), Carbon monoxide (CO), Carbon dioxide (CO₂)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains, Take up mechanically

Advice on how to clean up a spill

Take up mechanically.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

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6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Take precautionary measures against static discharge. Use only in well-ventilated areas. Ground/bond container and receiving equipment.

- Specific notes/details

Dust deposits may accumulate on all deposition surfaces in a technical room. The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Explosive atmospheres

Removal of dust deposits.

- Flammability hazards

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

- Ventilation requirements

Use local and general ventilation.

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)											
Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Ceiling-C [ppm]	Ceiling-C [mg/m³]	Notation	Source
GB	dust		WEL		10					i	EH40/2005
GB	dust		WEL		4					r	EH40/2005

Notation

Ceiling-C

i

r

STEL

ceiling value is a limit value above which exposure should not occur

inhalable fraction

respirable fraction

short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

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Notation

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours
time-weighted average (unless otherwise specified)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

In the case of wanting to use the gloves again, clean them before taking off and air them well.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

Particulate filter device (EN 143).

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	solid (powder)
Colour	dark orange - dark red
Odour	characteristic
Melting point/freezing point	~200 °C
Boiling point or initial boiling point and boiling range	not determined
Flammability	flammable solid in accordance with GHS criteria
Lower and upper explosion limit	not determined
Flash point	not applicable
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
pH (value)	not applicable
Kinematic viscosity	not relevant

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Solubility(ies)	not determined
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Partition coefficient

Partition coefficient n-octanol/water (log value)	this information is not available
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Vapour pressure	not determined
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Density and/or relative density

Density	not determined
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Relative vapour density	information on this property is not available
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Particle characteristics	no data available
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9.2 Other information

Information with regard to physical hazard classes	there is no additional information
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Other safety characteristics

Solid content	100 %
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SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". It's a reactive substance. The mixture contains reactive substance(s). Risk of ignition.

If heated:

Risk of ignition

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints to prevent fire or explosion

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

10.5 Incompatible materials

Oxidisers

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10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification acc. to GHS

Acute toxicity

Harmful if swallowed.

- Acute toxicity estimate (ATE)

Oral 500 mg/kg

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

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12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of $\geq 0,1\%$.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID	UN 1325
IMDG-Code	UN 1325
ICAO-TI	UN 1325

14.2 UN proper shipping name

ADR/RID	FLAMMABLE SOLID, ORGANIC, N.O.S.
IMDG-Code	FLAMMABLE SOLID, ORGANIC, N.O.S.
ICAO-TI	Flammable solid, organic, n.o.s.
Technical name	2,4-Dinitrophenylhydrazine

14.3 Transport hazard class(es)

ADR/RID	4.1
IMDG-Code	4.1
ICAO-TI	4.1

14.4 Packing group

ADR/RID	III
IMDG-Code	III
ICAO-TI	III

14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

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14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) - Additional information

Classification code	F1
Danger label(s)	4.1



Special provisions (SP)	274
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 kg
Transport category (TC)	3
Tunnel restriction code (TRC)	E
Hazard identification No	40
Emergency Action Code	1Z

Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) - Additional information

Classification code	F1
Danger label(s)	4.1



Special provisions (SP)	274
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 kg
Transport category (TC)	3
Hazard identification No	40

International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant	-
Danger label(s)	4.1



Special provisions (SP)	223, 274
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 kg
EmS	F-A, S-G
Stowage category	B

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International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Danger label(s) 4.1



Special provisions (SP) A3

Excepted quantities (EQ) E1

Limited quantities (LQ) 10 kg

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Relevant provisions of the European Union (EU)

Deco-Paint Directive

VOC content	0 %
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Industrial Emissions Directive (IED)

VOC content	0 %
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National regulations (GB)

List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

not listed

Restrictions according to GB REACH, Annex 17

Dangerous substances with restrictions (GB REACH, Annex 17)			
Name of substance	Name acc. to inventory	CAS No	No
2,4-Dinitrophenylhydrazine	flammable / pyrophoric		40

National inventories

Country	Inventory	Status
AU	AIIC	substance is listed
CA	DSL	substance is listed
CN	IECSC	substance is listed
EU	ECSI	substance is listed
JP	CSCL-ENCS	substance is listed
KR	KECI	substance is listed
NZ	NZIoC	substance is listed
PH	PICCS	substance is listed
TW	TCSI	substance is listed
US	TSCA	substance is listed (ACTIVE)

Legend

AIIC Australian Inventory of Industrial Chemicals

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Legend

CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
KECI	Korea Existing Chemicals Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
1.1	Registration number (REACH): this information is not available		yes
2.1		Classification acc. to GHS: change in the listing (table)	yes
2.2		- Hazard statements: change in the listing (table)	yes
2.2		- Precautionary statements: change in the listing (table)	yes
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (EDC) in a concentration of $\geq 0,1\%$.	yes
3.1		CAS No: change in the listing (table)	yes
5.2	Special hazards arising from the substance or mixture: Risk of explosion in case of drying up. Deposited combustible dust has considerable explosion po- tential.	Special hazards arising from the substance or mixture: Deposited combustible dust has considerable ex- plosion potential.	yes
7.1	Specific notes/details: Dust deposits may accumulate on all deposition surfaces in a technical room. The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion. Risk of explosion in case of drying up.	Specific notes/details: Dust deposits may accumulate on all deposition surfaces in a technical room. The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.	yes
7.2	- Evaporative conditions: Keep container tightly closed and in a well-ventil- ated place.		yes
7.2		- Flammability hazards: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.	yes
9.1	Appearance		yes
9.1	Other safety parameters		yes
9.1	Flammability (solid, gas): this material is combustible, but will not ignite readily	Flammability: flammable solid in accordance with GHS criteria	yes

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Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
9.1		Lower and upper explosion limit: not determined	yes
9.1	Evaporation rate: not determined		yes
9.1	Explosion limits of dust clouds: not determined		yes
9.1		Decomposition temperature: not relevant	yes
9.1		Kinematic viscosity: not relevant	yes
9.1		Density and/or relative density	yes
9.1	Vapour density: this information is not available		yes
9.1	Viscosity: not relevant (solid matter)		yes
9.1	Explosive properties: none		yes
9.1	Oxidising properties: none		yes
9.1		Particle characteristics: no data available	yes
9.2		Information with regard to physical hazard classes: there is no additional information	yes
9.2		Other safety characteristics	yes
10.1	Reactivity: Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".	Reactivity: Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". It's a reactive substance. The mixture contains reactive substance(s). Risk of ignition.	yes
10.1	In dry state: Danger of explosion, Danger of dust explosion		yes
10.1		If heated: Risk of ignition	yes
10.4	Conditions to avoid: There are no specific conditions known which have to be avoided.	Conditions to avoid: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.	yes
11.2		Information on other hazards: There is no additional information.	yes
12.5	Results of PBT and vPvB assessment: Data are not available.	Results of PBT and vPvB assessment: According to the results of its assessment, this substance is not a PBT or a vPvB.	yes
12.6	Other adverse effects: Data are not available.	Endocrine disrupting properties: Does not contain an endocrine disruptor (EDC) in a concentration of $\geq 0,1\%$.	yes
14.1	UN number: 3380	UN number or ID number	yes

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14.1		ADR/RID: UN 1325	yes
14.1		IMDG-Code: UN 1325	yes
14.1		ICAO-TI: UN 1325	yes
14.2	UN proper shipping name: DESENSITIZED EXPLOSIVE, SOLID, N.O.S.	UN proper shipping name	yes
14.2		ADR/RID: FLAMMABLE SOLID, ORGANIC, N.O.S.	yes
14.2		IMDG-Code: FLAMMABLE SOLID, ORGANIC, N.O.S.	yes
14.2		ICAO-TI: Flammable solid, organic, n.o.s.	yes
14.3	Class: 4.1 (solid desensitized explosives)		yes
14.3		ADR/RID: 4.1	yes
14.3		IMDG-Code: 4.1	yes
14.3		ICAO-TI: 4.1	yes
14.4	Packing group: I (substance presenting high danger)	Packing group	yes
14.4		ADR/RID: III	yes
14.4		IMDG-Code: III	yes
14.4		ICAO-TI: III	yes
14.7	UN number: 3380		yes
14.7	Proper shipping name: DESENSITIZED EXPLOSIVE, SOLID, N.O.S.		yes
14.7	Class: 4.1		yes
14.7	Packing group: I		yes
14.7	Classification code: D	Classification code: F1	yes
14.7	Special provisions (SP): 274, 311	Special provisions (SP): 274	yes
14.7	Excepted quantities (EQ): E0	Excepted quantities (EQ): E1	yes
14.7	Limited quantities (LQ): 0	Limited quantities (LQ): 5 kg	yes

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14.7	Transport category (TC): 1	Transport category (TC): 3	yes
14.7	Tunnel restriction code (TRC): B	Tunnel restriction code (TRC): E	yes
14.7		Hazard identification No: 40	yes
14.7	Emergency Action Code: 1W	Emergency Action Code: 1Z	yes
14.7		Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) - Additional information	yes
14.7		Classification code: F1	yes
14.7		Danger label(s): 4.1	yes
14.7		Danger label(s): change in the listing (table)	yes
14.7		Special provisions (SP): 274	yes
14.7		Excepted quantities (EQ): E1	yes
14.7		Limited quantities (LQ): 5 kg	yes
14.7		Transport category (TC): 3	yes
14.7		Hazard identification No: 40	yes
14.7	UN number: 3380		yes
14.7	Proper shipping name: DESENSITIZED EXPLOSIVE, SOLID, N.O.S.		yes
14.7	Class: 4.1		yes
14.7	Packing group: I		yes
14.7	Special provisions (SP): 274, 311	Special provisions (SP): 223, 274	yes
14.7	Excepted quantities (EQ): E0	Excepted quantities (EQ): E1	yes
14.7	Limited quantities (LQ): 0	Limited quantities (LQ): 5 kg	yes
14.7	EmS: F-B, S-J	EmS: F-A, S-G	yes
14.7	Stowage category: D	Stowage category: B	yes

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14.7	International Civil Aviation Organization (ICAO-IATA/DGR): Carriage prohibited.	International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information	yes
14.7		Danger label(s): 4.1	yes
14.7		Danger label(s): change in the listing (table)	yes
14.7		Special provisions (SP): A3	yes
14.7		Excepted quantities (EQ): E1	yes
14.7		Limited quantities (LQ): 10 kg	yes
15.1		National regulations (GB)	yes
15.1		List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list: not listed	yes
15.1		Restrictions according to GB REACH, Annex 17	yes
15.1		Dangerous substances with restrictions (GB REACH, Annex 17): change in the listing (table)	yes
15.1		National inventories: change in the listing (table)	yes
16		Abbreviations and acronyms: change in the listing (table)	yes
16	Key literature references and sources for data: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU. Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).	Key literature references and sources for data: Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).	yes
16		List of relevant phrases (code and full text as stated in section 2 and 3): change in the listing (table)	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
DGR	Dangerous Goods Regulations (see IATA/DGR)

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EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STEL	Short-term exposure limit
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H206	Fire, blast or projection hazard; increased risk of explosion if desensitising agent is reduced.
H228	Flammable solid.
H302	Harmful if swallowed.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.